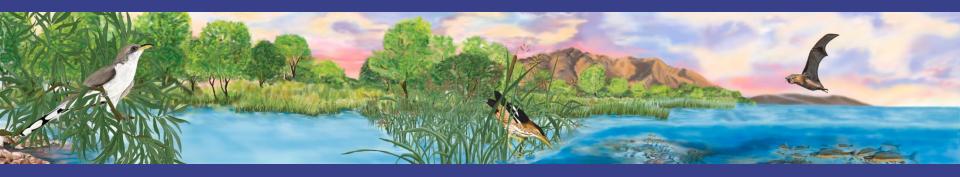
Balancing Resource Use and Conservation

LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM



John Swett
Program Manager
LCR MSCP
Bureau Of Reclamation
Boulder City, Nevada



Balancing Resource Use and Conservation

LCR MSCP FY2012 Funding Summary

FY2012	FY2012	FY2012	Cumulative
Total Required	Approved	Actual	Program
Funding	Estimate	Obligations	Accomplishment
\$33,323,400	\$33,494,780	\$31,357,384.98	\$132,648,293.91



Balancing Resource Use and Conservation

FY2012 Program Element Accomplishment

Program Administration	\$ 917,627.80 (3%)
Fish Augmentation	\$ 1,445,753.47 (5%)
Species Research	\$ 3,380,469.25 (11%
System Monitoring	\$ 3,196,087.72 (10%
Conservation Area D&M	\$ 14,208,374.95 (45%
Post Development Monitoring	\$ 1,528,763.33 (5%)
AMP	\$ 1,138,791.56 (4%)
Habitat Maintenance Fund	\$ 5,445,000.00 (17%
Public Outreach	\$ 96,516.90 (*%)
TOTAL	\$ 31,357,384.98



Balancing Resource Use and Conservation

2012 Restoration Accomplishments

- 3 Stand Alone Conservation Measures "Complete"
- **9 Conservation Areas**



Balancing Resource Use and Conservation

Site Selection Activities

- -Planet Ranch
- -Mohave Valley Backwater (California)
- -PVER South (California)
- -Parker Dam Camp (California)
- -Haughtelin Lake Wildlife Area (California)
- -Virgin & Gila Rivers

Restoration Research



- -Soil & Groundwater Monitoring Network
- -Seed Feasibility?

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2012 Planting Accomplishments

Palo Verde Ecological Reserve (Phase 7): 226 acres of CW

Hunters Hole: 44 acres

Beal Lake (SWFL Marsh) 9 acres

TOTAL: 279 acres



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Hunters Hole Conservation Area







Conservation Area	Established LC Types	Managed Acreage	Available Lands
E1: Beal Lake Riparian Restoration	116	116	116
E4: Palo Verde Ecological Reserve	985	985	1,021
E5: Cibola Valley Conservation Area ¹	670	779	1,282
E9: Hart Mine Marsh	255	255	255
E14: Imperial Ponds Conservation Area ²	92	126	126
E25: Big Bend	15	15	15
E24: Cibola NWR	270	950	950
E27: Laguna Division Conservation Area	0	0	1,107
E31: Hunters Hole	44	44	
Total	2,447	3,270	4,916



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2013 Development

Palo Verde ER: 36 acres of honey mesquite (last one)

Cibola NWR Unit #1: 94 acres of cottonwood-willow

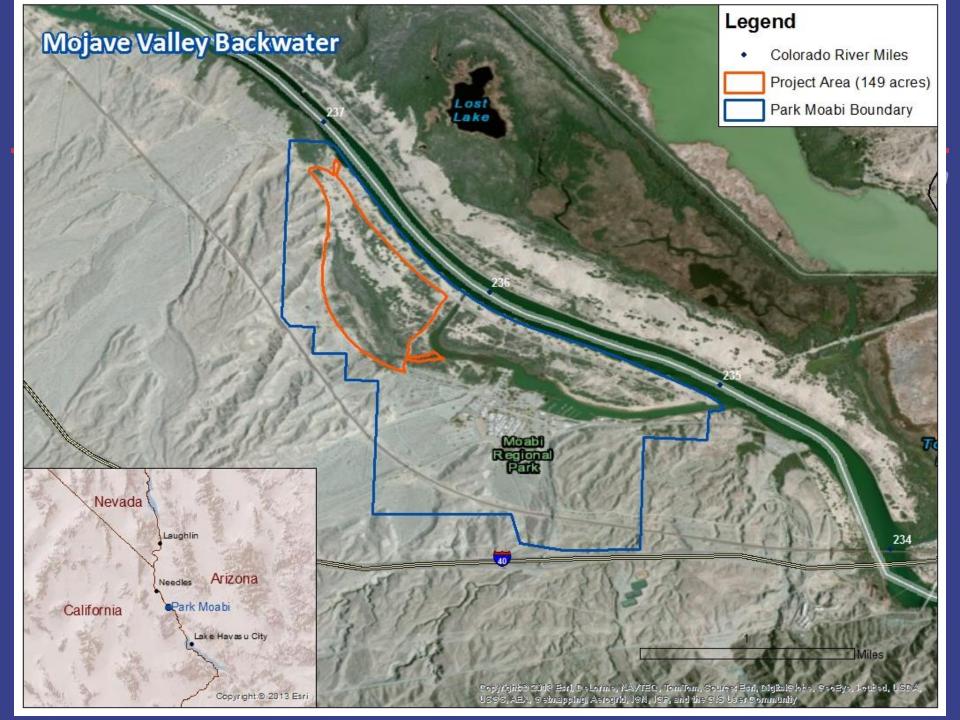
Laguna Division CA: Marsh in Reach 1

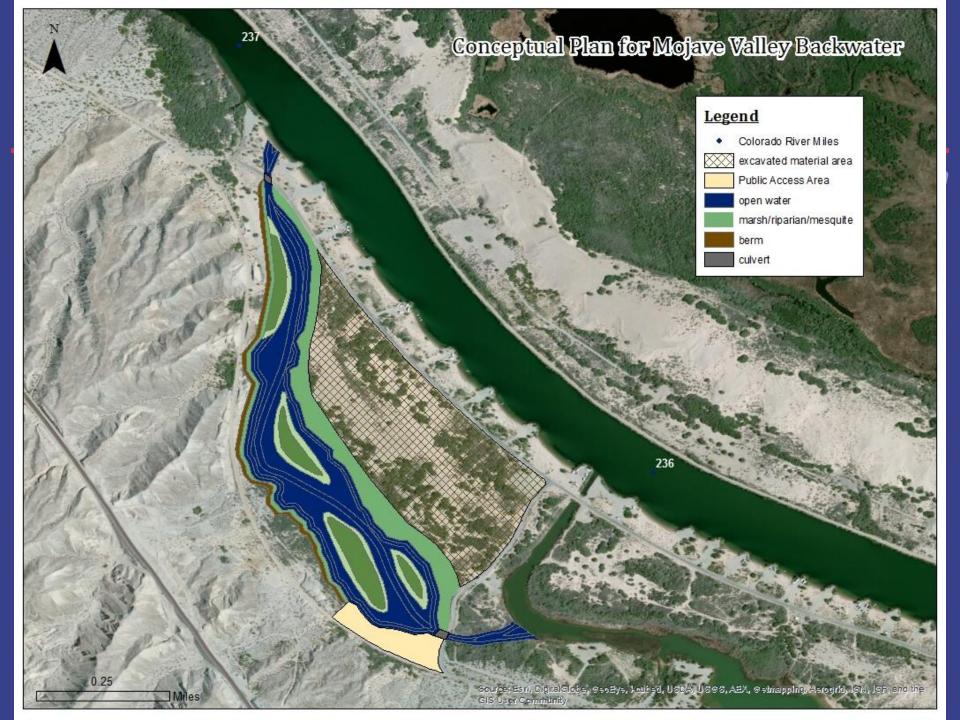
2014-2015 Development

Laguna Division Conservation Area (1,107 acres)

Mohave Valley Backwater (52 acres/85 total acres)







Balancing Resource Use and Conservation

Parker Dam Camp

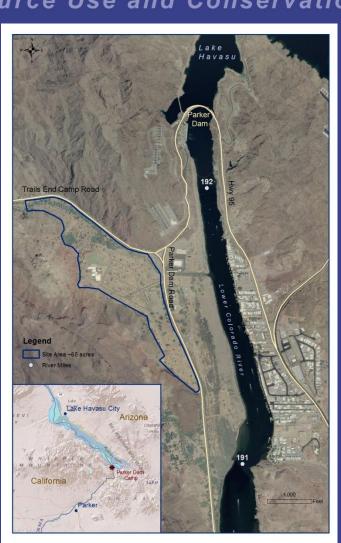
- -Target 36 acres of disconnected backwater
- -Complimentary cottonwood-willow-mesquite

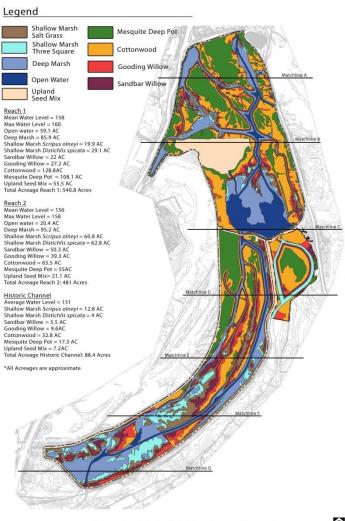
Subsurface Investigations (6 borings)

- -Well water TDS 2,060 mg/l & 14,300 mg/l
- -River TDS 600 mg/l
- -200-300 gpm

Riparian Restoration Concept?











PLANTING PLAN













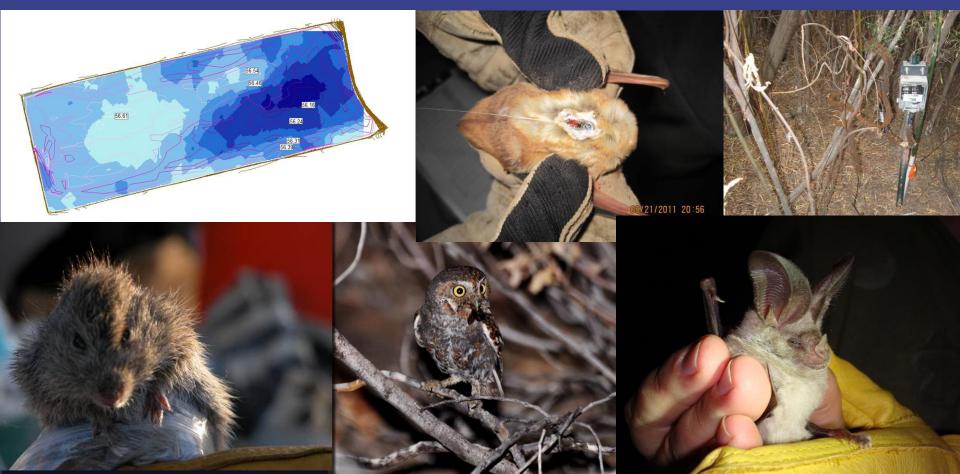
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2012 Wildlife Accomplishments



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SPECIES RESEARCH



- Completed and Peer Reviewed an Elf Owl System-Wide Survey Protocol
- Habitat Model Assessments were conducted for YWAR, BEVI, SUTA, and GIWO
- Initiated a Soil Amendment Study at Beal Lake
- Conducted a Western Red Bat and Western Yellow Bat Roosting Characteristics Study



Balancing Resource Use and Conservation

SYSTEM MONITORING



- Marsh Bird Surveys Detected up to 54 Clapper Rail per Survey Period, up to 27 Least Bitterns, and 3 Black rail detections.
- SWFL Presence/Absence Surveys conducted at 59 sites with 87 breeding adults. Nest Success was 42%.
- MAPS was conducted at three sites: Beal Lake, Cibola NWR Unit #1, CVCA; 660 birds were captured, including 3 LCR MSCP Species (YWAR, SUTA, and BEVI).
- Riparian Bird Monitoring was conducted at 80 Survey Plots, 161 species were recorded including LCR MSCP covered species (YWAR, GIWO, SUTA, and BEVI).



- Yellow-billed cuckoo surveys were conducted at 49 sites including all LCR MSCP Conservation Areas. Cuckoos were detected 282 times and nested at Beal Lake, PVER, CVCA, Cibola NWR Unit #1 with 28 nests located.
- Cotton rats were monitored and located near the Yuma area, PVER, Cibola NWR Unit #1, CVCA, Areas within Havasu NWR and Big Bend. CRCR found at Big Bend.
- Lowland Leopard Frog and Colorado River Toad Surveys were conducted and Colorado River Toads located at Planet Ranch.
- Four permanent Anabat Stations continue to operate with all four LCR MSCP bat species detected. Outflight counts were conducted at several mines.



Balancing Resource Use and Conservation

Big Bend Conservation Area

3 LCR MSCP covered species

Beal Lake Conservation Area

11 LCR MSCP Covered Species

Palo Verde Ecological Reserve

9 LCR MSCP Covered Species

Cibola Valley Conservation Area

• 8 LCR MSCP Covered Species

Cibola NWR (Unit1 & HMM)

12 LCR MSCP Covered Species

Imperial Conservation Area

6 LCR MSCP Covered Species





Post-Development Monitoring

Balancing Resource Use and Conservation

2012 Fisheries Accomplishments



Balancing Resource Use and Conservation

Fish Augmentation

Stocked 27,105 razorback

Stocked 7,821 bonytail





Historical Fish Augmentation

Year	Razorback	Bonytail
2005	17,014	6,941
2006	29,065	8,111
2007	21,114	9,137
2008	19,433	5,189
2009	24,299	6,579
2010	22,476	4,993
2011	25,598	7,122
2012	27,105	7,821
Total	186,103	55,893
Total Augmentation	118,324	55,893



Balancing Resource Use and Conservation

Larval Collection

• USBR staff collected 14,809 RASU larvae

• Other agencies collected 10,194 RASU larvae

• Total of 25,003 RASU larvae collected in 2012



Balancing Resource Use and Conservation

Fisheries Research Highlights 2012

C31: RASU population genetic variation continue to be maintained in Lake Mohave

C33: RASU capture rates related to fish size at release



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Fisheries Monitoring 2012 - D8

- Wild-born RASU larvae collected at 3 sites in Lake Mead
- Ongoing and recent successful recruitment in Lake Mead suspected
- RASU population estimates in Reach 2 (2,577) and Reach 3 (2,770) derived

Balancing Resource Use and Conservation

FY2014 Work Plan and Budget



Balancing Resource Use and Conservation

FY2014 Funding Requirements*
(Preliminary Inflation Rate = 1.276%)

Funding Entity	FY2014 Contributions	FY2014 Adjusted Contributions
Federal	\$17,570,520.00	\$17,570,520.00
Non-Federal	\$17,570,520.00	\$17,570,520.00
California	\$ 8,785,260.00	\$ 9,663,786.00
Arizona	\$ 4,392,630.00	\$ 2,635,578.00
Nevada	\$ 4,392,630.00	\$ 5,271,156.00
TOTAL	\$35,141,040.00	\$35,141,040.00



Balancing Resource Use and Conservation

FY2014 Proposed Work Plans

Program Administration	\$ 1,298,968
Fish Augmentation	\$ 1,675,000
Species Research	\$ 4,939,000
System Monitoring	\$ 3,265,000
Conservation Area D&M	\$13,821,000
Post Development Monitoring	\$ 1,425,000
AMP	\$ 1,350,000
Habitat Maintenance Fund	\$ 6,928,680
Remedial Measures Fund	\$ 339,416
Public Outreach	\$ 100,000
TOTAL	\$35,142,064